Little Rock Dec 3d 1857

Dear Sir

A small party have spent the past Summer & fall among the Indians where we found large bodies of Talcose Slate & Pyrites containing gold, a Specimen of each you will find enclosed, having seen an article in the march Number (1857) of the Scientific American stating that you had asserted that Chloride of Lime would take out gold from Sand and all earthy matter, has induced us to address you. We have made some experiments - roasted, pulverized, washed, used Acids & precipitated with Copperas water - pulverized (without roasting) & salted with Chloride of Lime & precipitated with Copperas water - was successful, but have had poor success in reducing it to a metalic State under the blow pipe especially that obtained by your process. — Is it necessary to roast the ores when Chloride of Lime is used? what is the best flux to use with the blow pipe? what is the best method of smelting it on a large scale? can these ores be worked on a large scale with Chloride of Lime? Is it necessary to warm the Chloride of Lime before making use of it? Does Talcose Slate & Pyrites improve in richness the deeper we go down? Can you refer us to any good or late work that would give us all the information on this subject that we may want? - In the mountains where we found these ores, almost all of the Slates & Pyrites contain gold, small veins of Pyrites not thicker than a half Dollar running through Slate, quartz and Calcareous Spar, contained Gold. Can you give us any information in a Geological point

that would be of benifit to us respecting the Pyrites?

we found a range of mountains that were a solid mass of flint, running through them, we traced for several miles a vein of Red & Green Talcose Slate about 14 feet wide as handsome as any you ever saw, we have always found copper. Do you think we would find a load of copper by sinking a shaft? — We are residents of New Orleans on our way home, shall remain but a short time, before we return, If you feel inclined to answer this we would request an early reply, as we desire to get all the information we can before returning

Yours Respectfully

Loyal Case

Prof Torrey

New York

Please address

Loyal Case

Box 67

New Orleans

Louisiana

Is silver ever found in Pyrites?

enclosed you will find a small piece of clay. I wish you would dissolve it with Chloride of lime, precipitate with Sesquicarbonate & inform us what the sediment is

Case

TORREY CORRESPONDENCE
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